



BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 372-6339

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/buildingcode

TRACO Security Windows & Doors, Inc.
71 Progress Avenue
Cranberry Township, PA 16066

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone.

DESCRIPTION: Series "Coastal-240" Aluminum Single Hung Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. 05-TRA-0003, titled "Coastal-240 Single Hung Window Large Missile Impact Resistant", sheets 1 through 3 of 3, prepared by Frank L. Bennardo, P.E. Consulting Engineer, dated 01/13/2003 with revision "3" on 10/23/2006, signed and sealed and dated 10/08/2007 by Frank L. Bennardo, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises and supersedes** NOA # 05-0930.03 and consists of this page 1 and evidence pages E-1 and E-2 as well as the approval document mentioned above.

The submitted documentation was reviewed by **Jaime D. Gascon, P.E.**



J. Gascon
11/2/07

NOA No 06-1121.14
Expiration Date: March 17, 2013
Approval Date: November 22, 2007
Page 1

TRACO Security Windows & Doors, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **05-TRA-0003**, titled "Coastal-240 Single Hung Window Large Missile Impact Resistant", sheets 1 through 3 of 3, prepared by Frank L. Bennardo, P.E. Consulting Engineer, dated 01/13/2003 with revision "3" on 10/23/2006, signed and sealed and dated 10/08/2007 by Frank L. Bennardo, P.E.

B. TESTS


1. Test reports on 1) Air Infiltration Test, PA 202-94
2) Uniform Static Air Pressure Test, Loading PA 202-94
3) Water Resistance Test, PA 202-94
4) Large Missile Impact Test, PA 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Resistance, PA 202-94
along with marked-up drawings and installation diagram of an aluminum single hung window, prepared by American Test Lab. of South Florida, Test Report No. **ATL-0713.01-99**, dated 10/07/1999, signed and sealed by William R. Mehner, P.E. and Henry Hattem, P.E. With addendum letter dated 2/23/2000, signed and sealed by William R. Menner, P.E.
(Submitted under NOA# 05-0930.03)
2. Test reports on 1) Air Infiltration Test, PA 202-94
2) Uniform Static Air Pressure Test, Loading PA 202-94
3) Water Resistance Test, PA 202-94
4) Large Missile Impact Test, PA 201-94
5) Cyclic Wind Pressure Loading, PA 203-94
6) Forced Entry Resistance, PA 202-94
along with marked-up drawings and installation diagram of an aluminum single hung window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-2363**, dated July 22, 1999, signed and sealed by Jose D. Mitrani, P.E.
(Submitted under NOA# 05-0930.03)

C. CALCULATIONS:

1. Revised Anchor calculations and structural analysis, prepared by Frank L. Bennardo, P.E. Consulting Engineer dated 10/08/2007, signed and sealed by Frank L. Bennardo, P.E.
Complies with ASTM E 1300-98/ 02

D. QUALITY ASSURANCE

1. Miami Dade Building Code Compliance Office (BCCO).


Jaime D. Gascon, P.E.
Chief, Product Control Division
NOA No 06-1121.14
Expiration Date: March 17, 2013
Approval Date: November 22, 2007

TRACO Security Windows & Doors, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

E. MATERIAL CERTIFICATION:

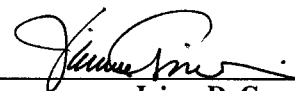
1. Notice of Acceptance No. **04-0721.01** issued to Elco Industries, Inc. for "Tapcon Concrete Anchors" dated 03/09/2006 expiring on 01/08/2011.
2. Notice of Acceptance No. **06-0216.06** issued to Solutia Inc. for their "**Saflex IIIIG Clear or colored Interlayer**" dated 05/04/2006, expiring on 05/21/2011.
3. Notice of Acceptance No. **05-1208.02** issued to E. I. DuPont DeNemours for "Laminated Glass with **Butacite®** as Interlayer" dated 01/06/2006, expiring on 12/11/2010.

E. STATEMENTS:

1. Statement letter of conformance and no financial interest 09/02/2005, signed and sealed by Frank L. Bennardo, P.E.
(Submitted under NOA# 05-0930.03)

G. OTHER

1. Notice of Acceptance No. **05-0930.03**, issued to TRACO Security Windows & Doors, Inc. for their Series "Coastal-240" Aluminum Single Hung Window – Impact Resistant, approved on 03/23/2006 and expiring on 03/17/2008.



Jaime D. Gascon, P.E.

Chief, Product Control Division

NOA No 06-1121.14

Expiration Date: March 17, 2013

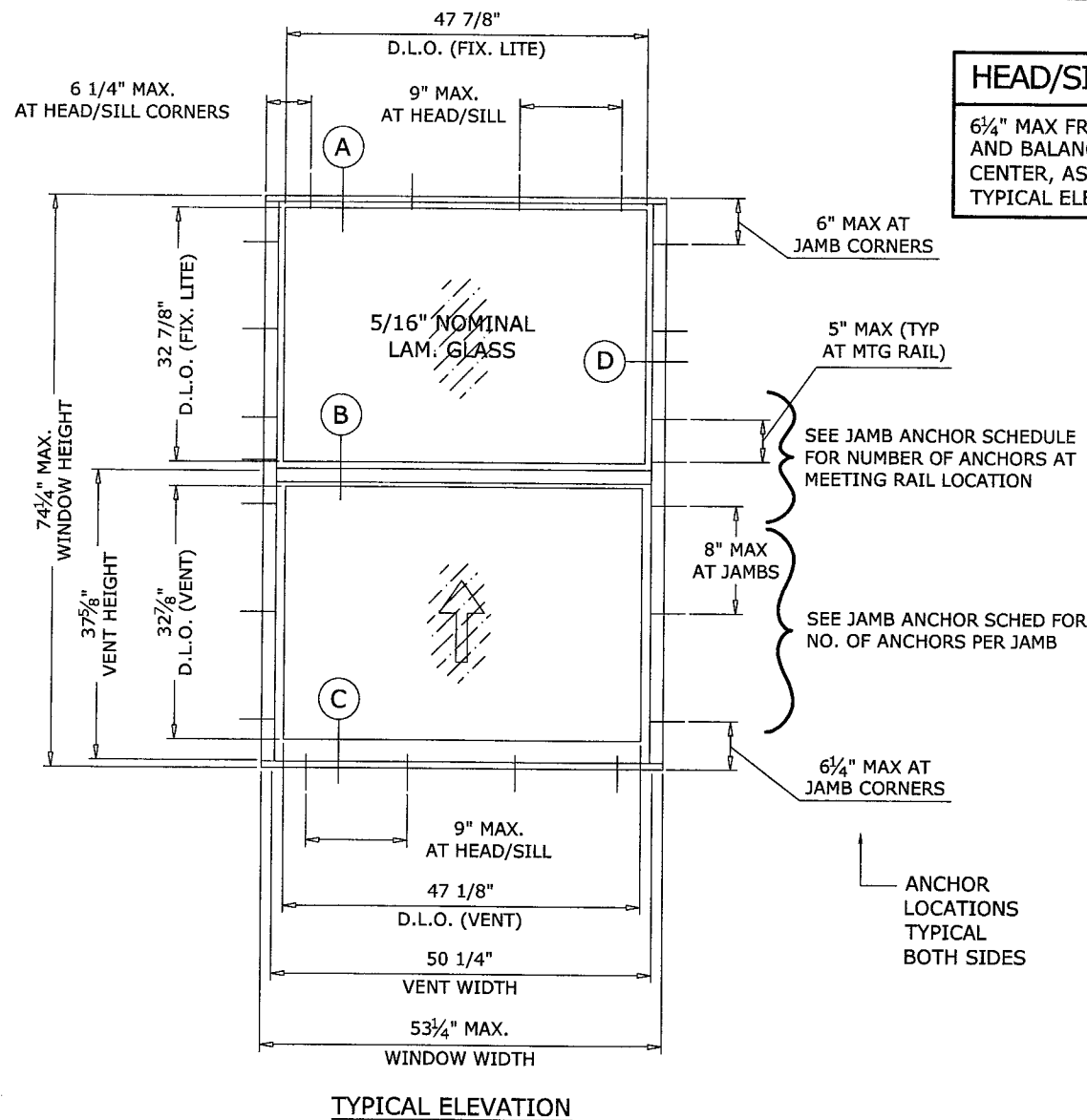
Approval Date: November 22, 2007

COASTAL-240 SINGLE HUNG WINDOW

LARGE MISSILE IMPACT RESISTANT

FRANK L. BENNARDO, P.E.
#PE0046549

10/08/2007



HEAD/SILL ANCHORS:

6 1/4" MAX FROM CORNERS
AND BALANCE @ 9" MAX ON
CENTER, AS SHOWN ON
TYPICAL ELEVATION.

JAMB ANCHORS:

WINDOW DIMS.		NUM OF ANCHORS	
WIDTH	HEIGHT	TOTAL	MTG RAIL
19 1/8"	26"	4	2
26 1/2"		4	2
37"		4	2
53 1/8"		4	2
19 1/8"	38-3/8"	6	2
26 1/2"		6	2
37"		6	2
53 1/8"		8	3
19 1/8"	50-5/8"	8	2
26 1/2"		8	2
37"		8	2
53 1/8"		7	3
19 1/8"	57"	8	2
26 1/2"		8	2
37"		8	2
53 1/8"		9	3
19 1/8"	63"	8	2
26 1/2"		8	2
37"		8	2
53 1/8"		10	4
19 1/8"	74-1/4"	10	2
26 1/2"		10	2
37"		10	2
53 1/4"		10	4

MAX DESIGN PRESSURE

+62 / -62 PSF

GENERAL NOTES:

1. THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE 2004 FLORIDA BUILDING CODE, HIGH VELOCITY HURRICANE ZONES, MIAMI-DADE COUNTY PROTOCOLS TAS 201, 202 & 203, AND ASTM E 1300-98.
2. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR $C_d=1.6$ HAS BEEN USED FOR WOOD ANCHOR DESIGN.
3. POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE.
4. THE SYSTEM DETAILED HEREIN HAS BEEN TESTED PER MIAMI-DADE COUNTY PROTOCOLS TAS-201, TAS-202, & TAS-203 AS REFERENCED IN TEST REPORTS #0713.01-99 BY AMERICAN TEST LAB (ATL), #2363 BY FENESTRATION TESTING LABORATORY (FTL) AND #T188-06 BY FARABAUGH ENGINEERING & TESTING, INC (FET). MULTIPLE UNITS MUST BE INSTALLED USING MIAMI-DADE COUNTY BCCO-APPROVED STRUCTURAL MULLIONS.
5. THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
6. PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.
7. PANELS GLAZED WITH 5/16" LAMINATED GLASS (BY 'GUARDIAN' OR 'TEMPGLASS') ARE LARGE MISSILE IMPACT RESISTANT AND DO NOT REQUIRE IMPACT RESISTANT SHUTTERS.
8. ANCHORS SHALL BE INSTALLED AS LISTED PER MANUFACTURER'S SPECIFICATIONS AND SPACED AS SHOWN HEREIN. ANCHOR EMBEDMENT TO BASE MATERIAL EXCLUDES STUCCO OR WALL DRESSING.
9. ALL STEEL IN CONTACT WITH ALUMINUM SHALL BE PAINTED OR PLATED.

LARGE MISSILE IMPACT RESISTANT WINDOWS
SHUTTERS NOT REQUIRED

- ① "TOTAL" INDICATES TOTAL NUMBER OF ANCHORS AT EACH JAMB (INCLUDES "MTG RAIL" ANCHORS). 8" MAX SPACING INCORPORATED INTO TOTAL NUMBER OF ANCHORS.
- ② "MTG RAIL" INDICATES NUMBER OF ANCHORS AT HORIZONTAL MEETING RAIL ENDS AT JAMBS (EACH END)

TYPICAL ANCHORS:

1. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. ANCHOR EMBEDMENT SHALL BE INTO BASE MATERIAL, EXCLUDING STUCCO OR OTHER WALL FINISH.
3. BASE MATERIAL SHALL BE WOOD ($G=0.55$ OR GREATER SPECIFIC GRAVITY), GROUT-FILLED BLOCK (MIN 1500 psi COMPRESSIVE STRENGTH FOR GROUT), OR CONCRETE (MIN 3000 PSI).
4. SEE EXTERIOR ELEVATIONS FOR ANCHOR LOCATIONS AND SPACING.
5. ENSURE MINIMUM OF 2-1/2" EDGE DISTANCE FOR ALL ANCHORS INTO GROUT-FILLED BLOCK (MIN 1500 PSI) OR CONCRETE (MIN 3000 PSI), AND MINIMUM OF 1-1/2" EDGE DISTANCE FOR ALL WOOD ANCHORS.
6. ANCHOR OPTIONS FOR INSTALLATION ARE AS FOLLOWS:

TO 2x WOOD BUCK OR WOOD STRUCTURE
#14 WOOD SCREW OR 1/4" TAPCONS (ITW OR ELCO) WITH 1-1/2" MINIMUM EMBEDMENT.

TO CONC (MIN 3000 PSI)
OR GROUT-FILLED BLOCK (MIN 1500 PSI)
(DIRECTLY OR THRU 1x OR 2x WOOD BUCK) 1/4"
TAPCONS (ITW OR ELCO) WITH 1-3/4" MINIMUM
EMBEDMENT TO CONC (MIN 3000 PSI) OR GROUT-FILLED
BLOCK (MIN 1500 PSI).

SEALANTS:

FRAME AND VENT CORNERS SEALED WITH SCHNEE MOREHEAD 5504.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 06-1121-14
Expiration Date 03/17/2013
By *[Signature]*
Miami Dade Product Control
Division

FRANK L. BENNARDO, P.E., INC.
CONSULTING ENGINEERS

160 S.W. 12th STREET, #106
DEERFIELD BEACH, FL 33442
(954) 354-0660 FAX: (954) 354-0443
WWW.FLBENGINEERING.COM
CERTIFICATE OF AUTHORIZATION: #9885



Windows & Doors Inc.

71 Progress Avenue
Cranberry Township, PA 16166

COASTAL-240 SINGLE HUNG WINDOW
LARGE MISSILE IMPACT RESISTANT
MIAMI-DADE PRODUCT APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	FLB	FLB	1/13/03
2004 FBC	CL	FLB	9/27/05
PART LABELS	CL	FLB	12/21/05
GE SILICONE OPTION	KL	CL	10/23/06

05-TRA-0003

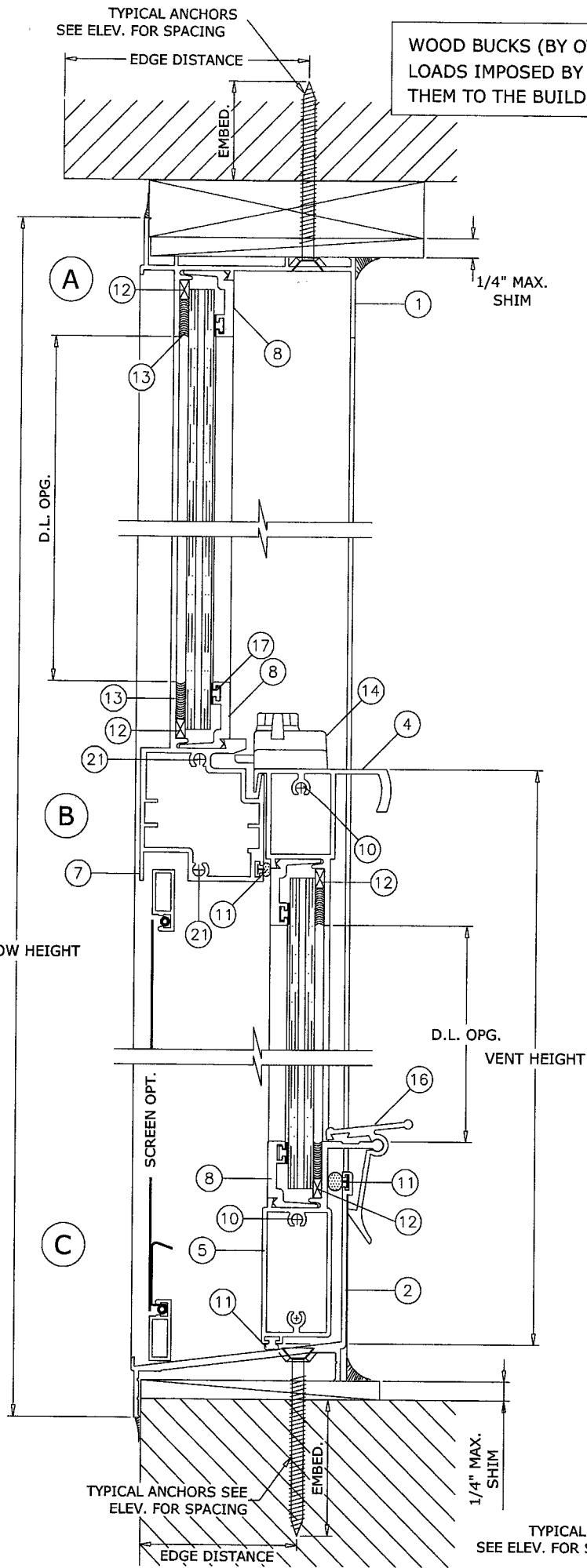
PAGE SCALE: -
DESCRIPTION:

1

10/08/2007 - 3:03pm keithl F:\01 Project Files\Traco (TRA)\2005 Jobs\05-TRA-0003 C-240 Single Hung LMI (NOA).dwg

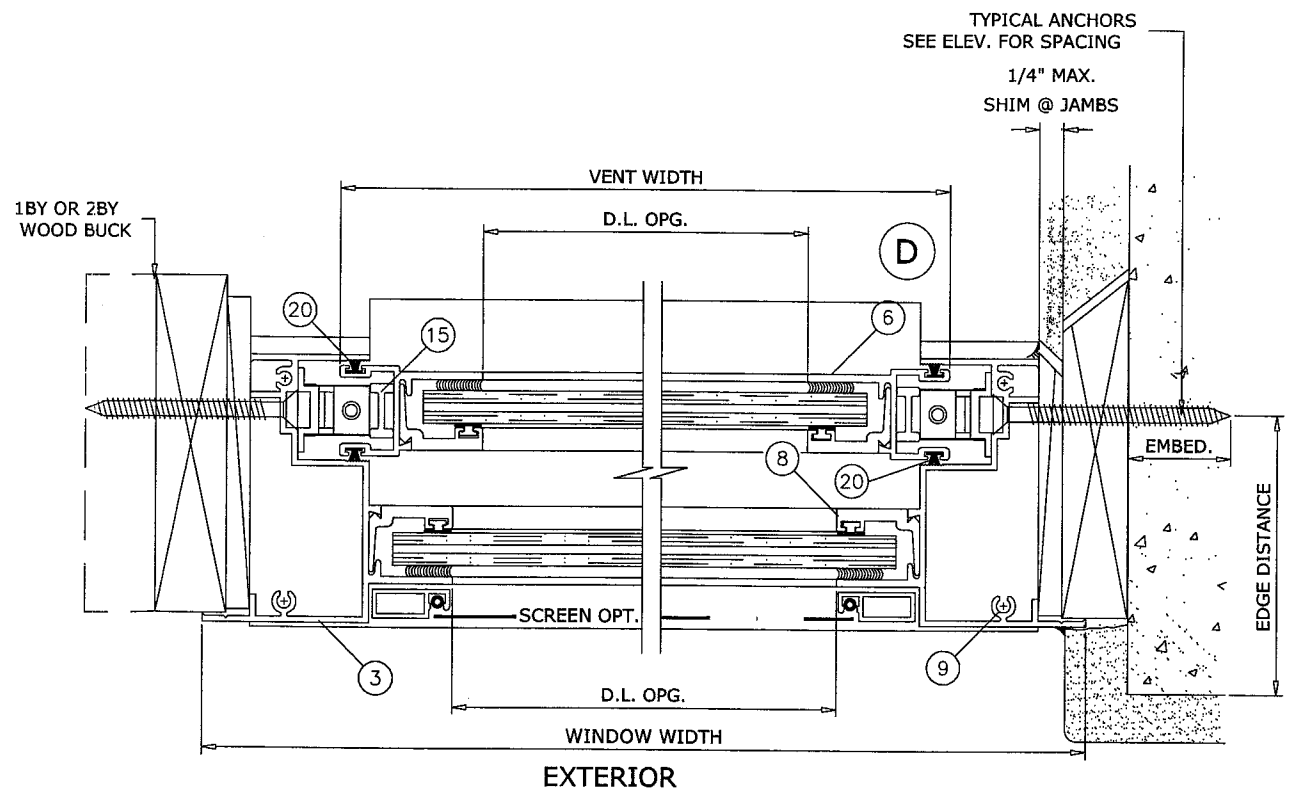
EXTERIOR

WINDOW HEIGHT



WOOD BUCKS (BY OTHERS), MUST SUSTAIN ALL LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

ITEM NO.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	050-00-572	1	FRAME HEAD	6063-T6	-
2	050-00-308	1	FRAME SILL	6063-T6	-
3	050-00-586	2	FRAME JAMB	6063-T5	-
4	051-00-571	1	VENT TOP	6063-T6	-
5	051-00-548	1	VENT BOTTOM	6063-T5	-
6	050-00-570	2	VENT SIDE	6063-T6	-
7	051-00-573	1	FIXED MEETING RAIL	6063-T6	-
8	050-00-569	4/ LITE	GLASS STOP	6063-T6	-
9	012-00-835	AS REQD.	FRAME ASSEMBLY SCREW		#8 X 1" PHPH SMS
10	012-00-835	AS REQD.	VENT ASSEMBLY SCREW		#8 X 1" PHPH SMS
11	046-00-098	AS REQD.	W'STRIPPING (FABRIC COATED FOAM)		SCHLEGEL Q-LON .375 X .190
12	046-16-102	12	SETTING BLOCK .10" X .30" X 1-5/8" LONG		5" FROM ENDS & AT MIDSPAN
13	-	AS REQD.	GLAZING COMPOUND	SILICONE	DOW 1199
14	007-10-016	2	SWEEP LOCK (AT 6-3/4" FROM ENDS)	ZINC CAST	MARBOLLO INT.
15	046-16-030	2	BLOCK AND TACKLE BALANCE		WINDOW COMPONENTS (5/8" BOX)
16	050-00-718	1	SNAP LATCH 3" LONG W/ SPRING	6063-T5	AT MID WIDTH
17	046-00-010	AS REQD.	BULB VINYL		WIBORG
18	-	-	-	-	-
19	-	-	-	-	-
20	047-00-015	AS REQD.	FIN SEAL PILE		AMESBURY 180X150 OR EQUIV.
21	012-00-130	4	MTG. RAIL ASSEMBLY SCREW		#10 X 1" PHPH SMS
22	05-0127-10 05-0128-16	AS REQD.	GLAZING COMPOUND TWO-PART GE STRUCTURAL SILICONE	SILICONE	GE RGS7700



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 06-1121-14
Expiration Date 03/17/2013
By *[Signature]*
Miami Dade Product Control
Division

FRANK L. BENNARDO, P.E.
#PE0046549
10/08/2007
FRANK L. BENNARDO, P.E., INC.
CONSULTING ENGINEERS
160 S.W. 12th STREET, #106
DEERFIELD BEACH, FL 33442
(954) 354-0660 FAX: (954) 354-0443
WWW.FLBENGINEERING.COM
CERTIFICATE OF AUTHORIZATION: #9885

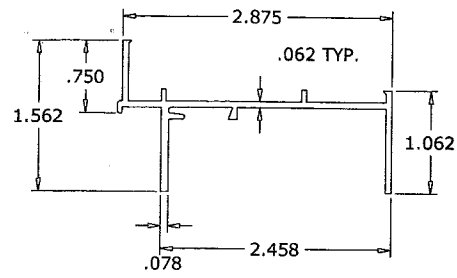
TRACO
Windows & Doors Inc.
71 Progress Avenue
Cranberry Township, PA 16166
COASTAL-240 SINGLE HUNG WINDOW
LARGE MISSILE IMPACT RESISTANT
MIAMI-DADE PRODUCT APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	FLB	FLB	1/13/03
2004 FBC	CL	FLB	9/27/05
PART LABELS	CL	FLB	12/21/05
GE SILICONE OPTION	KL	CL	10/23/06

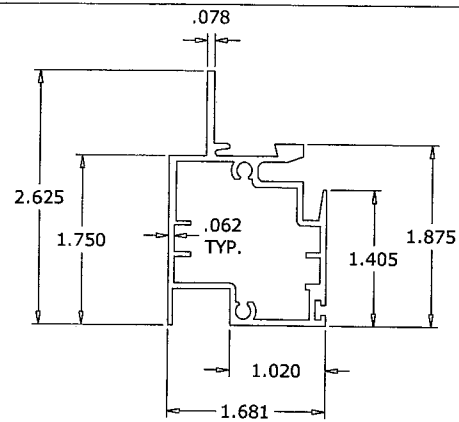
05-TRA-0003

PAGE SCALE: -
DESCRIPTION:

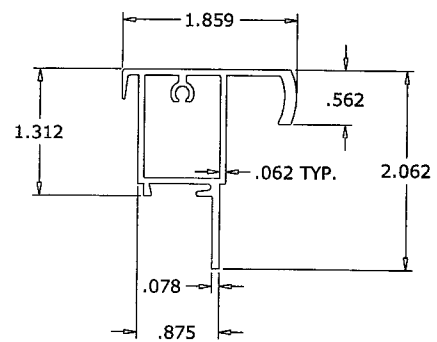
10/08/2007 - 3:03pm keithl F:\01 Project Files\Traco (TRA)\2005 Jobs\05-TRA-0003 C-240 Single Hung, LMI (NOA).dwg



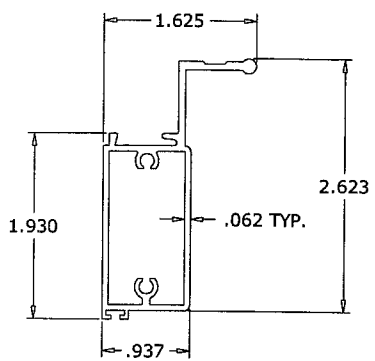
1 FRAME HEAD



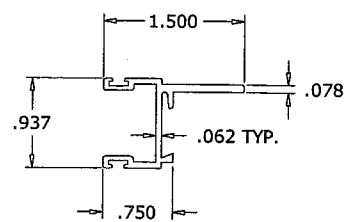
7 MEETING RAIL



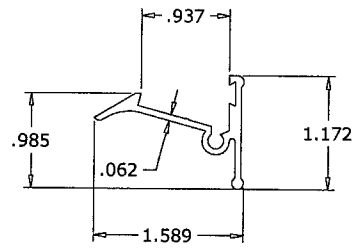
4 BOTTOM VENT TOP RAIL



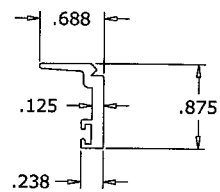
5 BOTTOM VENT BOTTOM RAIL



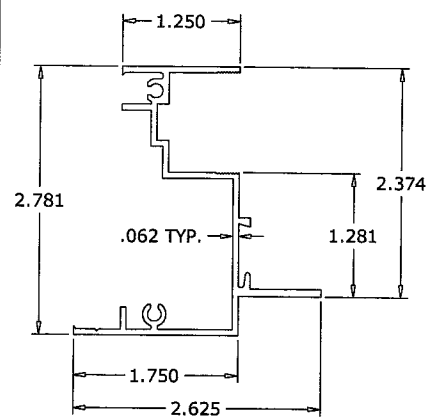
6 SASH SIDE RAIL



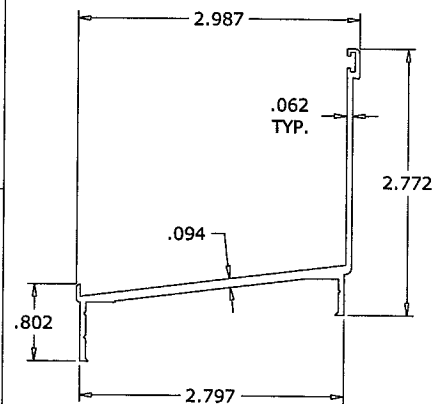
16 LATCH



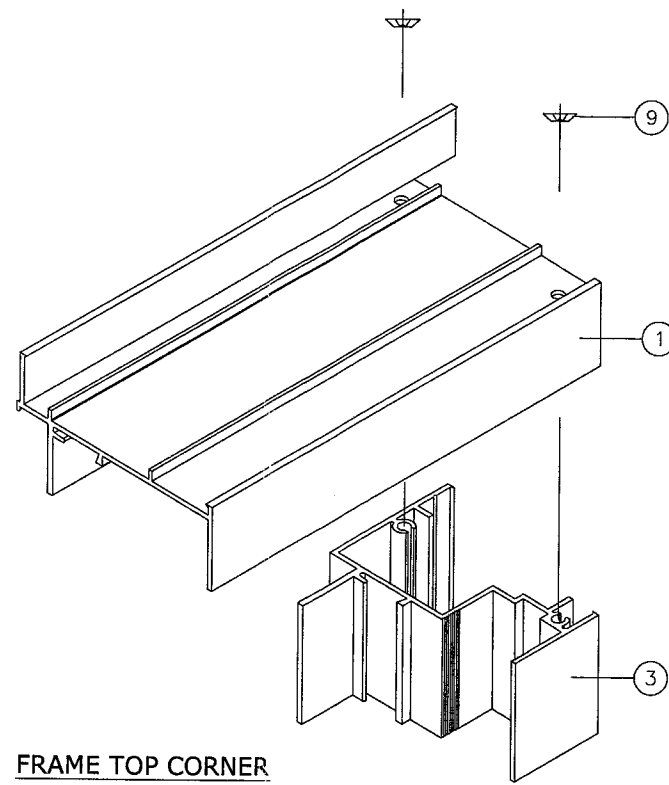
8 GLASS STOP



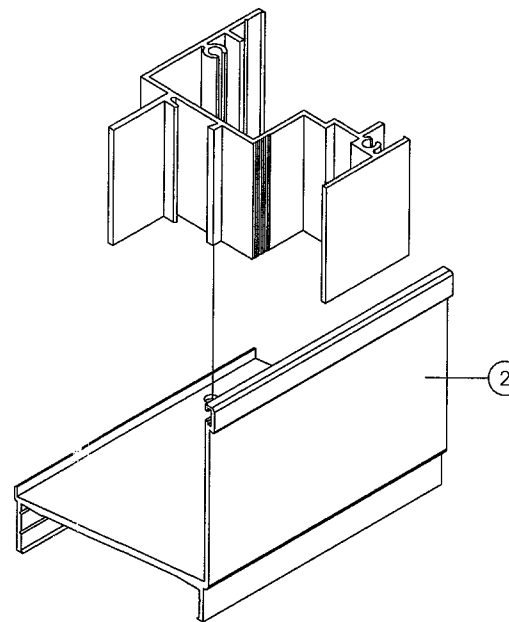
3 FRAME JAMB



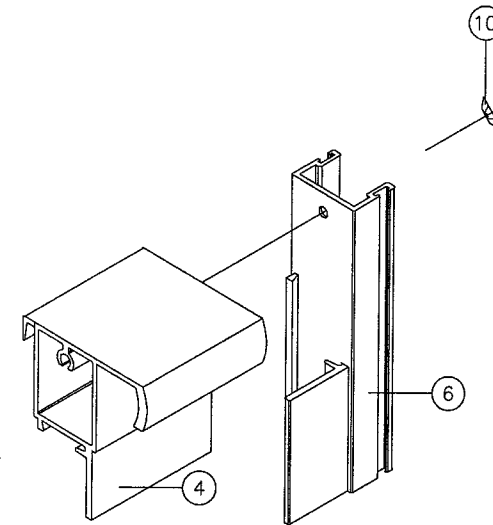
2 FRAME SILL



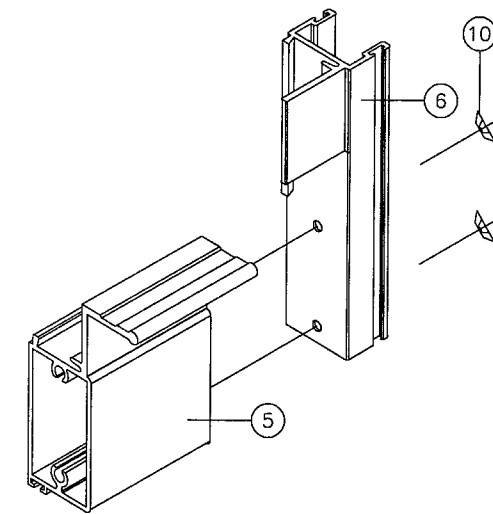
FRAME TOP CORNER



FRAME BOTTOM CORNER



VENT TOP CORNER



VENT BOTTOM CORNER

PRODUCT TESTED
as compliant with the Florida
Building Code
Acceptance No. 06-1121-14
Expiration Date 03/17/2013
By *[Signature]*
Miami Dade Product Control
Division

FRANK L. BENNARDO, P.E.
#PE0046549
10/08/2007
FRANK L. BENNARDO, P.E., INC.
CONSULTING ENGINEERS
160 S.W. 12th STREET, #106
DEERFIELD BEACH, FL 33442
(954) 354-0660 FAX: (954) 354-0443
WWW.FLBENGINEERING.COM
CERTIFICATE OF AUTHORIZATION: #9885

TRACO
Windows & Doors Inc.
71 Progress Avenue
Cranberry Township, PA 16166
COASTAL-240 SINGLE HUNG WINDOW
LARGE MISSILE IMPACT RESISTANT
MIAMI-DADE PRODUCT APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	FLB	FLB	1/13/03
2004 FBC	CL	FLB	9/27/05
PART LABELS	CL	FLB	12/21/05
GE SILICONE OPTION	KL	CL	10/23/06

05-TRA-0003

PAGE SCALE: -

DESCRIPTION:

3